# Product Brief



# PMB 8875

S-GOLDlite-Advanced Single-Chip GSM/GPRS Baseband Controller

S-GOLDlite is Infineon's latest single-chip baseband controller for use in next-generation GSM/GPRS mobile terminals. It is part of Infineon's S-GOLD<sup>TM</sup> family comprising an EDGE-capable device as well as a GPRS multislot class 12 solution to satisfy your specific application needs. Combining all analog and digital radio functions on a single chip, S-GOLDlite is suited for cost-optimized high-feature multimedia phones. The GSM/GPRS best-in-class modem functionality is combined with high-performance application capability based on a 124 MHz ARM<sup>®</sup>926 CPU enabling a variety of applications with a lot of headroom for personalizing your system. It provides the horsepower to support top-of-the-line multimedia features such as integrated camera, MMS, high-resolution color display, Java, and polyphonic ringing tones making it the perfect fit for high-volume, consumer-oriented terminal platforms.

Combined with Infineon's SMARTI SD CMOS RF device and S/M POWER management IC, S-GOLDlite enables a 3-chip quad-band solution at minimum cost and space requirements.

#### **Applications**

- GSM/GPRS multimedia phones with high feature requirements
- Data modules with GPRS support up to class 12

#### **Key Benefits**

- Single-chip modem and application processor
- Leading-edge modem technology
- Cost-optimized 3-chip system solution with low-power CMOS RF device
- Complete software suite available from Layer 1 up to application software based on APOXI API

### Key Features

- ARM 926-based single modem and application processor with cache support and fast tightly-coupled memories
- On-chip SRAM
- USB On-The-Go support
- TEAKLite®-based DSP subsystem
- Jazelle® Java hardware accelerator
- Advanced static and dynamic power management
- DMA support for many peripherals
- Support of A53/GEA-3 cipher algorithm
- Interface to Bluetooth module
- I<sup>2</sup>C bus interface
- I2S PCM digital audio I/Os
- Hifi stereo voiceband

#### Firmware

- FR, HR, EFR, AMR
- GPRS class 12, CS 1..4
- HSCSD class 10
- Echo cancellation
- Noise reduction
- E-OTD
- GTT/TTY
- MP3 decoder
- Polyphonic ringer

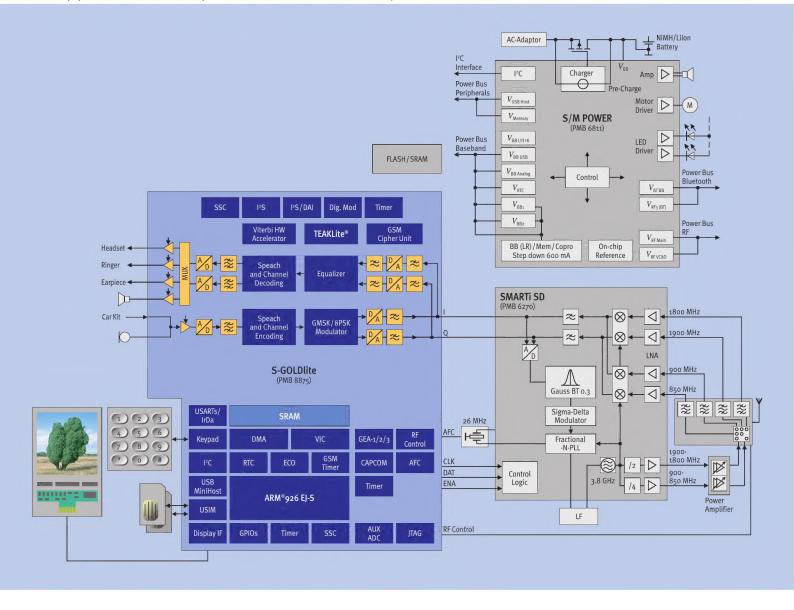
S-GOLDlite is already in mass production. Samples and evaluation boards are available at your request.

www.infineon.com/wireless

Mobile Solutions



## Application Example GPRS Quad-Band System Solution



Note: TEAKLite® is a registered trademark of ParthusCeva, Ltd. ARM® is a registered trademark of ARM, Ltd.

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